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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,701	07/29/2004	Robert J. Allen	BUR920040070US1	4700

44024 7590 03/27/2006

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EXAMINER

TAT, BINH C

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 03/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/710,701

Applicant(s)

ALLEN ET AL.

Examiner

Binh C. Tat

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/25/04, 07/29/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to application 10/710701 filed on 07/29/04.

Claims 1-20 remain pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Rodman et al.

(U.S. Patent No. 5757658).

3. As to claims 1, 8, and 14 Rodman et al. teach a method of placing a first integrated circuit macro in integrated a floor plan containing at least one second the steps of: a) defining edge constraints on at least one edge of the first integrated circuit macro (see fig 2, fig 6 col 5 line 48-60 and col 7 line 9 to col 8 line 23); b) defining edge constraints on at least one edge of the second integrated circuit macro (see fig 2, fig 6-8 col 7 line 9 to col 9 line 44); and c) automatically comparing said edge said at least one edge constraints on of the first integrated circuit macro and said edge constraints on said at least one edge of the second integrated circuit macro with one another (see fig 5a fig 5b fig 6-8 col 8 line 48 to col 12 line 11).

4. As to claims 2, 9, and 15 Rodman et al. teach wherein step c) includes performing a string searching algorithm (see fig 5a fig 5b fig 6-8 col 8 line 48 to col 12 line 11 and background).

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5. As to claims 3, 10, and 16 Rodman et al. teach further comprising the steps of generating a first edge constraint vector corresponding to said at least one edge of the first integrated circuit macro and generating a second edge constraint vector corresponding to said at least one edge of the second integrated circuit macro (fig 5a, fig 5b col 8 line 48 to col 9 line 65).

6. As to claim 4, 11, and 17 Rodman et al. teach further comprising the step of assigning signatures to said edge constraints of corresponding respective ones of said at least one edge of the first integrated circuit macro and at least one edge of the second integrated circuit macro (fig 5a, fig 5b col 8 line 48 to col 9 line 65).

7. As to claim 5, Rodman et al. teach further comprising, prior to step a), the step of defining a common unit of measure for use in steps a) and b) (see fig 2, fig 6 col 5 line 48-60 and col 7 line 9 to col 8 line 23).

8. As to claim 6, and 12, Rodman et al. teach wherein each of steps a) and b) includes measuring each of said edge constraints using said common unit of measure (see fig 2, fig 6 col 5 line 48-60 and col 7 line 9 to col 8 line 23).

9. As to claim 7, and 13 Rodman et al. teach wherein each of steps a) and b) further unit of measure includes assigning a signature to each located within each of said edge constraints (see fig 2, fig 6 col 5 line 48-60 and col 7 line 9 to col 8 line 23).

10. As to claim 18, Rodman et al. teach wherein said integrated circuit placing module comprises an edge constraint vectorizing sub-module operatively configured to generate an edge constraint vector for each of said active edges when at least one of said plurality of macros has been placed in said floor plan region (see fig 5a fig 5b fig 6-8 col 8 line 48 to col 12 line 11 and background).

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11. As to claim 19, Rodman et al. teach wherein, when at least one of said plurality of integrated circuit macros has been placed in said floor plan region, said GUI inter- face is operatively configured to highlight said active edge (see fig 5a fig 5b fig 6-8 col 8 line 48 to col 12 line 11 and background).

12. As to claim 20, Rodman et al. teach further comprising CAD software (see col 1 line 18 to col 2 line 30).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh C. Tat whose telephone number is 571 272-1908. The examiner can normally be reached on 7:30 - 4:00 (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571 272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Binh Tat
Art Unit 2825
March 17, 2005


THUAN DO
Primary examiner
3/20/06